

What is claimed is:

1 A computer readable recording medium, wherein an IP (Internet
Protocol) network service oriented DIT (Directory Information
5 Tree) construction including a customer sub-tree and a policy
sub-tree is recorded, said recording medium including mapping
established between said customer sub-tree and said policy
sub-tree.

10 2 The computer readable recording medium defined in Claim 1,
wherein said IP network oriented DIT construction sub-tree
further has network sub-trees.

15 3 A computer readable recording medium, wherein an IP (Internet
Protocol) network service oriented DIT (Directory Information
Tree) construction including a customer sub-tree and a policy
sub-tree is recorded, comprising:

plural service entries dangling below said customer
sub-tree;

20 plural policy rule entries dangling below each of said
service entries;

plural policy rule format entries dangling below said
policy sub-tree; and

25 plural service class definition entry dangling below said
system sub-tree;

each of said plural service entries including as an attribute a condition parameter which is referred to from each policy rule entry via each policy rule format entry;

5 each of said plural service entries including as an attribute an action parameter which is referred to from each policy rule entry via each policy rule format entry and via each service class definition entry.

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4 The computer readable recording medium defined in Claim 4, wherein each of said plural service entries further includes as an attribute a service type specifying a band and a packet transfer priority, said service type being the name of a specific one of said service class definition entries.

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5 The computer readable recording medium defined in Claim 4, wherein each of said plural service entries further includes as an attribute a rule creation state indicating whether or not a policy rule entry is created below each service entry itself.

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6 The computer readable recording medium defined in Claim 4, wherein each of said plural service entries further includes as an attribute a provisioning date/unprovisioning date which

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controls a policy setting/releasing operation from a policy management system.

5 7 The computer readable recording medium defined in Claim 4, wherein each of said plural service entries further includes as an attribute a network element acquired when a policy rule entry below each service entry is set.

10 8 The computer readable recording medium defined in Claim 4, wherein each of said plural service class definition entries further includes as an attribute a parameter representing a feature of a service corresponding to a service type and a pointer to a policy rule format entry to be applied to said service.

15 9 The computer readable recording medium defined in Claim 4, wherein each of said plural policy rule format entries further includes as an attribute a condition parameter and an action parameter, each to be possessed by a policy rule, and a network element to which said policy rule is applied.

20 10 The computer readable recording medium defined in Claim 4, wherein each of said plural policy rule entries further includes as an attribute a pointer to a corresponding policy rule format entry, a rule state indicating whether or not said
25 policy rule has been applied to a network element, and a target

network element specifying a network element to which said policy rule is applied.

5 11 The computer readable recording medium defined in Claim 4, wherein said IP network oriented DIT construction sub-tree further has network sub-trees.

10 12 The computer readable recording medium defined in Claim 3, wherein each of said plural service entries further includes as an attribute a rule creation state indicating whether or not a policy rule entry is created below each service entry itself.

15 13 The computer readable recording medium defined in Claim 12, wherein each of said plural service entries further includes as an attribute a provisioning date/unprovisioning date which controls a policy setting/releasing operation from a policy management system.

20 14 The computer readable recording medium defined in Claim 12, wherein each of said plural service entries further includes as an attribute a network element acquired when a policy rule entry below each service entry is set.

25 15 The computer readable recording medium defined in Claim

12, wherein each of said plural service class definition entries further includes as an attribute a parameter representing a feature of a service corresponding to a service type and a pointer to a policy rule format entry to be applied to said service.

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16 The computer readable recording medium defined in Claim 12, wherein each of said plural policy rule format entries further includes as an attribute a condition parameter and an action parameter, each to be possessed by a policy rule, and a network element to which said policy rule is applied.

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17 The computer readable recording medium defined in Claim 12, wherein each of said plural policy rule entries further includes as an attribute a pointer to a corresponding policy rule format entry, a rule state indicating whether or not said policy rule has been applied to a network element, and a target network element specifying a network element to which said policy rule is applied.

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18 The computer readable recording medium defined in Claim 12, wherein said IP network oriented DIT construction sub-tree further has network sub-trees.

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19 The computer readable recording medium defined in Claim 3, wherein each of said plural service entries further includes

as an attribute a provisioning date/unprovisioning date which controls a policy setting/releasing operation from a policy management system.

5 20 The computer readable recording medium defined in Claim 19, wherein each of said plural service entries further includes as an attribute a network element acquired when a policy rule entry below each service entry is set.

10 21 The computer readable recording medium defined in Claim 19, wherein each of said plural service class definition entries further includes as an attribute a parameter representing a feature of a service corresponding to a service type and a pointer to a policy rule format entry to be applied to said service.

15 22 The computer readable recording medium defined in Claim 19, wherein each of said plural policy rule format entries further includes as an attribute a condition parameter and an action parameter, each to be possessed by a policy rule, and
20 a network element to which said policy rule is applied.

23 The computer readable recording medium defined in Claim 19, wherein each of said plural policy rule entries further includes as an attribute a pointer to a corresponding policy
25 rule format entry, a rule state indicating whether or not said

policy rule has been applied to a network element, and a target network element specifying a network element to which said policy rule is applied.

5 24 The computer readable recording medium defined in Claim 19, wherein said IP network oriented DIT construction sub-tree further has network sub-trees.

10 25 The computer readable recording medium defined in Claim 3, wherein each of said plural service entries further includes as an attribute a network element acquired when a policy rule entry below each service entry is set.

15 26 The computer readable recording medium defined in Claim 25, wherein each of said plural service class definition entries further includes as an attribute a parameter representing a feature of a service corresponding to a service type and a pointer to a policy rule format entry to be applied to said service.

20 27 The computer readable recording medium defined in Claim 25, wherein each of said plural policy rule format entries further includes as an attribute a condition parameter and an action parameter, each to be possessed by a policy rule, and a network element to which said policy rule is applied.

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28 The computer readable recording medium defined in Claim
25, wherein each of said plural policy rule entries further
includes as an attribute a pointer to a corresponding policy
rule format entry, a rule state indicating whether or not said
5 policy rule has been applied to a network element, and a target
network element specifying a network element to which said policy
rule is applied.

29 The computer readable recording medium defined in Claim
10 25, wherein said IP network oriented DIT construction sub-tree
further has network sub-trees.

30 The computer readable recording medium defined in Claim
3, wherein each of said plural service class definition entries
15 further includes as an attribute a parameter representing a
feature of a service corresponding to a service type and a pointer
to a policy rule format entry to be applied to said service.

31 The computer readable recording medium defined in Claim
20 30, wherein each of said plural policy rule format entries
further includes as an attribute a condition parameter and an
action parameter, each to be possessed by a policy rule, and
a network element to which said policy rule is applied.

25 32 The computer readable recording medium defined in Claim

30, wherein each of said plural policy rule entries further includes as an attribute a pointer to a corresponding policy rule format entry, a rule state indicating whether or not said policy rule has been applied to a network element, and a target network element specifying a network element to which said policy rule is applied.

33 The computer readable recording medium defined in Claim 30, wherein said IP network oriented DIT construction sub-tree further has network sub-trees.

34 The computer readable recording medium defined in Claim 3, wherein each of said plural policy rule format entries further includes as an attribute a condition parameter and an action parameter, each to be possessed by a policy rule, and a network element to which said policy rule is applied.

35 The computer readable recording medium defined in Claim 34, wherein each of said plural policy rule entries further includes as an attribute a pointer to a corresponding policy rule format entry, a rule state indicating whether or not said policy rule has been applied to a network element, and a target network element specifying a network element to which said policy rule is applied.

36 The computer readable recording medium defined in Claim
34, wherein said IP network oriented DIT construction sub-tree
further has network sub-trees.

5 37 The computer readable recording medium defined in Claim
3, wherein each of said plural policy rule entries further
includes as an attribute a pointer to a corresponding policy
rule format entry, a rule state indicating whether or not said
10 policy rule has been applied to a network element, and a target
network element specifying a network element to which said policy
rule is applied.

15 38 The computer readable recording medium defined in Claim
37, wherein said IP network oriented DIT construction sub-tree
further has network sub-trees.

20 39 The computer readable recording medium defined in Claim
3, wherein said IP network oriented DIT construction sub-tree
further has network sub-trees.